



**PRODUCT MANUAL FOR MODEL**

**IOD16022 AND IOD22030**

**COUNTER TOP DISPENSER**



## **Introduction**

To the owner or user: This product manual is a source of information about the installation, start up, cleaning, maintenance and repair of the product.

The IOD16022 and IOD22030 are ice only counter top dispensers designed to use 22 inch wide and 30 inch wide respectfully Ice-O-Matic cubed ice machines as the source of ice.

Ice from the cuber falls into the insulated bin where it is stored until needed. When a user pushes the dispense button, a rotating wheel scoops the ice up to the top front of the bin where there is an outlet to the ice chute. Ice will dispense continually for as long as the push button or lever is depressed or until the bin is empty.

## **Table of Contents**

|                           |            |
|---------------------------|------------|
| Specification/Limitations | Page 2-3   |
| Installation              | Page 4-7   |
| Cleaning                  | Page 8-9   |
| Service Diagnosis         | Page 10    |
| Parts List                | Page 11-19 |
| Wiring Diagram            | Page 20-21 |
| Warranty Information      | Page 3     |

**Note the warning symbol where it appears in this manual.**  
**It is an alert for important safety information on a hazard**  
**that might cause serious injury.**



**Keep this manual for future reference.**

## Specifications

IOD16022  
IOD22030

### Limitations:

Must meet the same limitations as the cuber installed on top of it:

50° F. air minimum

100° F. air maximum

Must be installed indoors.

Must allow at least 6 inch clearance at the rear and both sides when using an **air cooled** ice machine.

Must allow space for the utility connection at the back.

Must have a drain.

### Options (Field Installed) ( \*Required )

\*Thermostatic Bin Control Kit (22 Inch Ice Series) Part Number 1051134-01

\*Thermostatic Bin Control Kit (30 Inch Ice Series) Part Number 1051020-02

Manual Water Glass Filler Kit Part Number KISWGF

Ice Machine Adapters

\*22 inch cuber

Part Number KBT2222

\*30 inch cuber

Part Number KBT3030

\*22 inch machine on a 30 inch dispenser

Part Number KBT2230

Leg Kit

Part Number KIOD4

### Dispenser Specifications

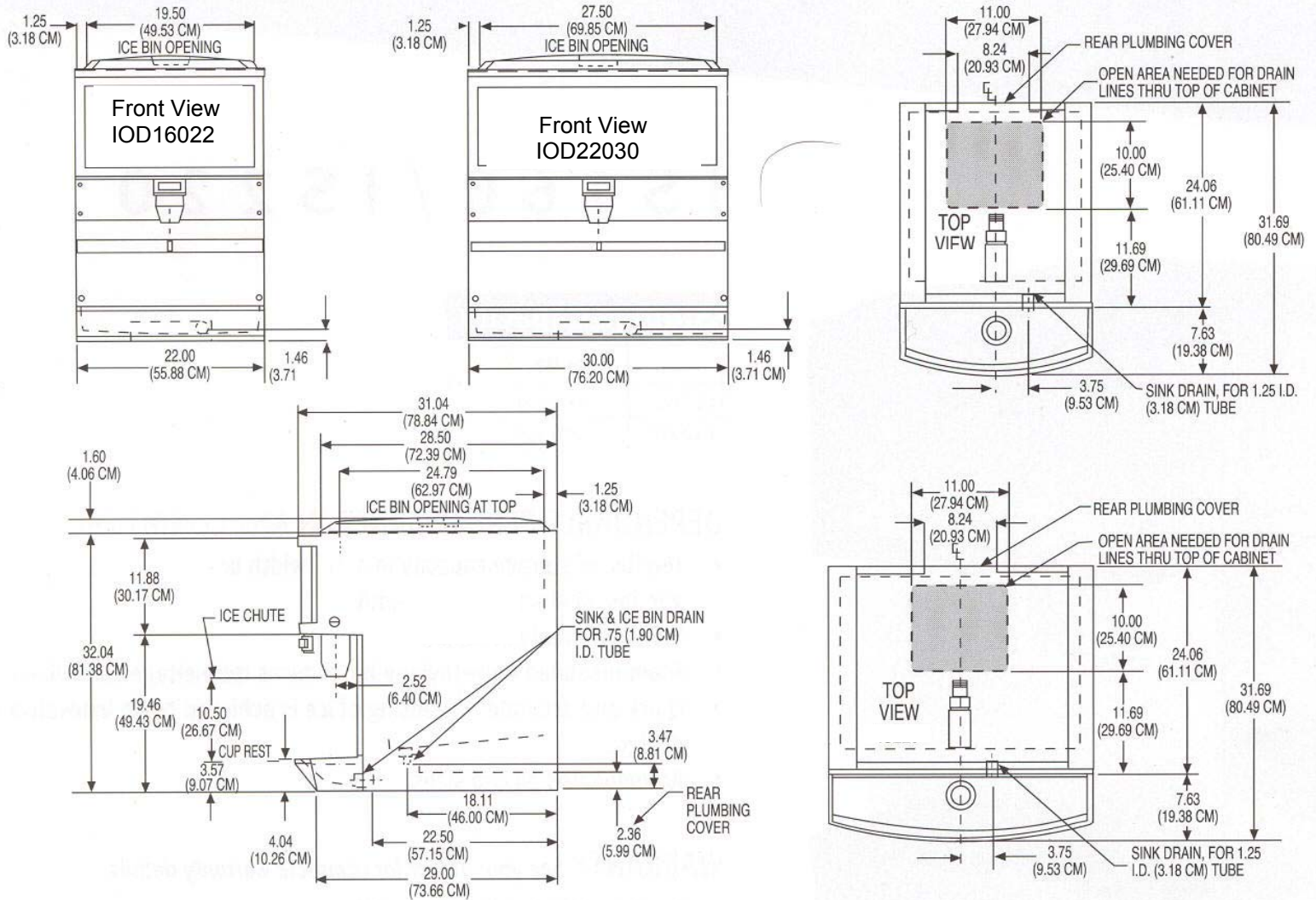
| <u>Model Number</u> | <u>Storage Capacity(lbs-kgs)</u> | <u>Basic Electrical</u> | <u>Actuation</u> | <u>Min. Circuit Ampacity</u> | <u>Max. Fuse Size</u> |
|---------------------|----------------------------------|-------------------------|------------------|------------------------------|-----------------------|
| IOD16022            | 160/70                           | 115/60/1                | Lever            | 2                            | 15                    |
| IOD16022            | 160/70                           | 115/60/1                | Button           | 2                            | 15                    |
| IOD22030            | 220/100                          | 115/60/1                | Lever            | 2                            | 15                    |
| IOD22030            | 220/100                          | 115/60/1                | Button           | 2                            | 15                    |

### Dimensions ( Inches)

| <u>Model Number</u> | <u>Width</u> | <u>Depth</u> | <u>Height</u> |
|---------------------|--------------|--------------|---------------|
| IOD16022            | 22 inches    | 32 inches    | 34 inches     |
| IOD22030            | 30 inches    | 32 inches    | 34 inches     |

Note: Counter top legs are included with the dispenser.

# Dispensers Specifications



**Ice-O-Matic ice machines are not designed for outdoor installations.**

Machine requires voltage indicated on rating nameplate. Failures caused by improper voltage are not considered factory defects. Extended periods of operation at temperatures exceeding limitations constitutes misuse under the terms of the Ice-O-Matic Manufacture's Limited Warranty, resulting in a loss of warranty coverage. Specifications and design are subject to change without notice.

**The IOD16022 and IOD22030 carry a 2 year Parts warranty and a 1 year Labor Warranty.**

## Installation: General

### Equipment Description

The IOD16022 and IOD22030 are counter top mounted ice only dispensers. These units are designed to dispense cube ice only and have ice storage capacities of 160 lb. and 220 lb. respectively.

### Site Preparation

The site chosen for the dispenser must be capable of supporting the dispenser with a full bin of ice plus all other loads being placed on the surface supporting the dispenser. If an ice machine is being placed on the dispenser, the weight of the ice machine must be included in the calculations to determine the support structure needed for the dispenser.

Allow sufficient clearance above the unit for removal of the cover and for pouring ice into the bin.

A 115 volt, 15 amp electric outlet needs to be located within 6 feet of the unit. **The outlet must be properly grounded and fused. No other electrical appliance should be on the circuit. ALL ELECTRICAL WIRING MUST CONFORM TO NATIONAL AND LOCAL CODES**

Do not place the dispenser next to heat sources such as ovens, heat ducts or in the warm air discharge from adjacent equipment.

The unit must be located near a building drain. Drain lines must be properly vented and pitched to ensure free flowing of wastewater to the drain.

These dispensers are designed to dispense cubed ice only. Do not use flaked, crushed or compressed ice forms.

If an Ice-O-Matic ice machine is to be placed on top of the dispenser, an adapter will be required.

|                     |                                    |                     |
|---------------------|------------------------------------|---------------------|
| Ice Machine Adapter | 22 inch cuber                      | Part Number KBT2222 |
| Ice Machine Adapter | 22 inch cuber on 30 wide dispenser | Part Number KBT2230 |
| Ice Machine Adapter | 30 inch cuber                      | Part Number KBT3030 |

### Dispenser Preparation

Remove the shipping carton and discard.

Remove the merchandiser by lifting up on the merchandiser and pulling it forward.

Remove the drain pan from the skid, and all hardware from the bin.

Remove the splash panel by removing the two phillips head screws near the bottom corners of the panel.

Remove the 4 brackets holding the dispenser to the skid.

(Optional) Screw 4 legs into the well nuts in the bottom of the dispenser.

**In order to comply with NSF requirements, this unit must be either elevated above the counter top sufficiently to provide space for cleaning under the unit or the unit must be sealed to the counter top. Elevating the unit may be accomplished by using legs. (IOM Part Number KIOD4)**

## Installation: General

### Drain Line Installation (Dispenser)

Connect a  $\frac{3}{4}$ " ID flexible drain hose to the drain nipple located under the ice storage bin. Clamp the hose in place and insulate the hose to prevent condensation.

Connect a  $\frac{3}{4}$ " ID flexible drain hose to the drain tube at the back of the drain pan. Clamp the drain hose in place.

### Dispenser Installation

If the dispenser is to be sealed to the counter top, the drain tubing should be available and planned such that the connections may be finished after the unit has been sealed to the counter.

Sealing may be accomplished by the Use of RTV rubber sealant such as Dow Corning 731.

With the unit located on the counter as desired:

Tilt or lift the unit to expose the bottom flanges of the base frame.

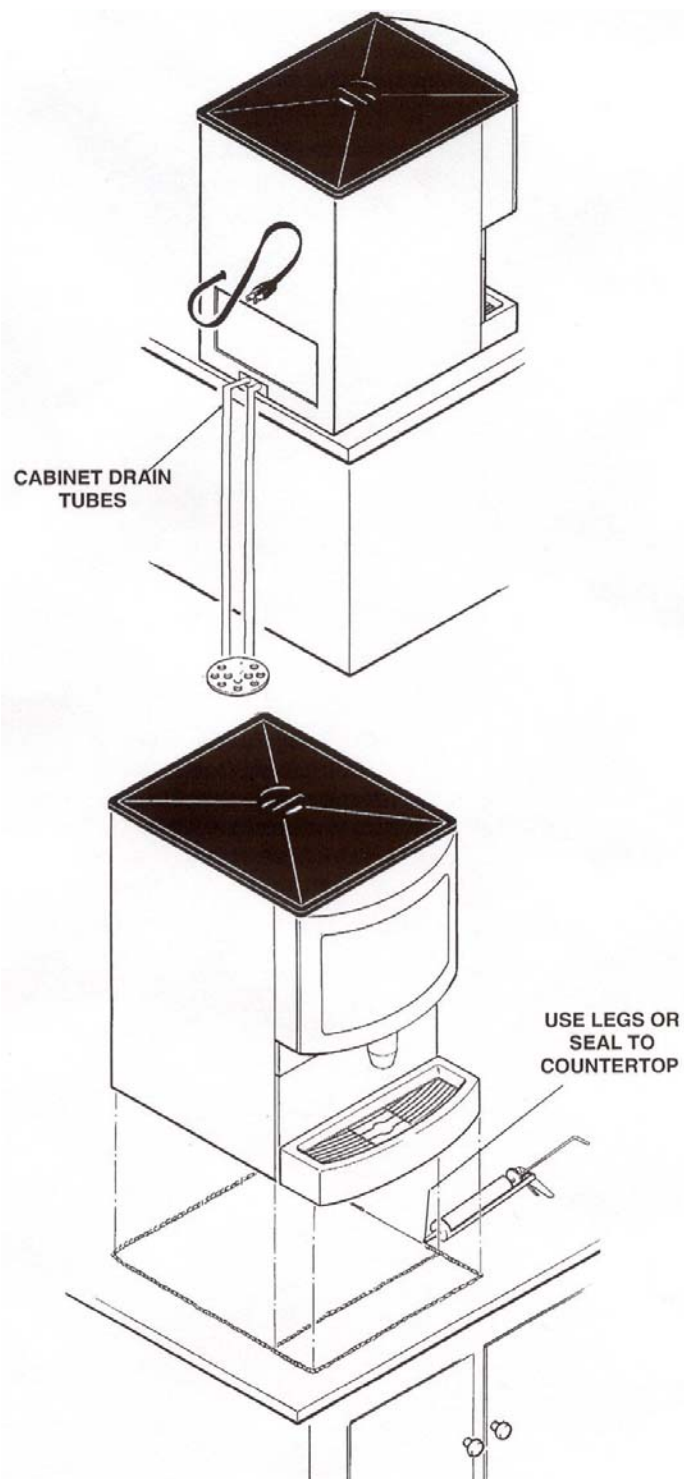
Apply the sealant to cover the bottom Flanges of the base frame

Return the unit to the desired position on the counter top.

Add sealant around the base frame and Counter top to provide a seal with a radius of  $\frac{1}{2}$  inch. Follow the sealant manufacturer's instructions on the package for working with the sealant, and cleaning up.

Seal around all access holes in the counter Top with Permagum or Mortite caulk or an equivalent material.

Route the drain lines to the building drain. The drain lines must be pitched and vented to ensure proper flowage of the wastewater.



## Installation: General

### Final Preparation

Install the drain pan on the dispenser by engaging the slots in the metal backplate of the drain pan onto the brackets protruding from the lower left and right hand corners of the dispenser front. Push down on the drain pan to lock it into place.

When applicable, seal the drain pan to the counter top. If the dispenser is to be sealed to the counter top, use the sealant recommended in the “**Dispenser Installation**” section of the instructions.

Place the cup rest into the drain pan.

Install the fluorescent bulb into the bulb holders located on the top sloped portion of the front of the dispenser.

Place the merchandiser on the unit.

Sanitize the ice storage system. (See page 9)

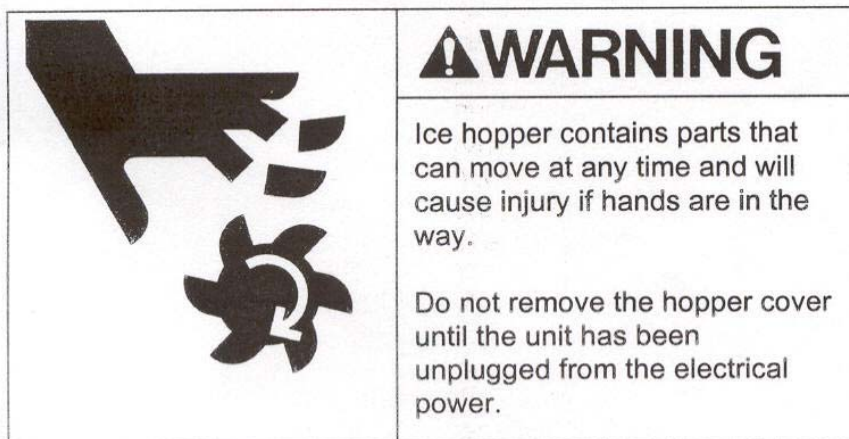
### Start-Up

Fill the bin with sanitary ice.

Place the cover on top of the dispenser.

#### Note:

**This unit is provided with a timer that will activate the ice dispenser rotor for 1 to 6 seconds each time the unit is plugged into an electrical outlet and every 2 hours thereafter. The agitation cycle helps to keep the ice from fusing together during long periods of non-use. No ice is dispensed during the agitation.**



Plug the unit's power cord into the electrical outlet. The rotor should turn for a few seconds and the fluorescent bulb should illuminate. Dispense several containers of ice.

Check all connections including drain hoses for leaks. Repair as required.

## Installation: General

---

### Ice Machine Installation

Make sure the counter the dispenser is placed on is structurally able to hold the combined weight of the dispenser, ice and ice machine.

Remove the dispenser cover. (Retain for future use)

Place the appropriate stainless steel KBT adapter onto the top of the dispenser.

22 inch wide ice machine on a 22-inch wide dispenser. Part number KBT2222

22 inch wide ice machine on a 30-inch wide dispenser. Part Number KBT2230

30 inch wide ice machine on a 30-inch wide dispenser. Part Number KBT3030

Install the thermostatic bin control kit when applicable. Part Number 1051020-02

**Note: The thermostatic bin control kit is required on all ICE Series Cubers.**

Using silicone sealant, place a bead of sealant onto the top edges of the area on the adapter where the ice machine will go.

Install the ice machine onto the dispenser, center the machine left to right and align the machine flush to the back.

Install the thermostatic bin control cap tube into the thermal well mounted in the bin.

**Note: The thermostatic bin control kit is required on all ICE Series Cubers.**

Fasten together at the back of the machine using fasteners from the icemaker and mounting hardware from the kit.

Place the front cover plate onto the dispenser in front of the ice machine.

Follow the ice machine start-up instructions included with the ice machine.

### Completion

Make a final check for any leaks and correct as necessary.

Reinstall the splash panel and secure it with two Phillips head screws.

Check for proper operation of the dispense system.

Instruct the site manager regarding the requirements for maintaining, operation and sanitizing the dispenser.

## Cleaning and Sanitizing

The dispenser **must** be cleaned and sanitized periodically as prescribed by local health authority or the product supplier, whichever has jurisdiction. Ice-O-Matic recommends the dispenser be cleaned and sanitized at least monthly if not specified by local code requirement.

### Dispenser Cleaning and Sanitizing Procedures

**WARNING:** When using cleaning fluids or any chemicals, rubber gloves and eye protection should be worn.

The sink, grill and splash panel should be cleaned daily.

The ice storage system should be sanitized monthly.

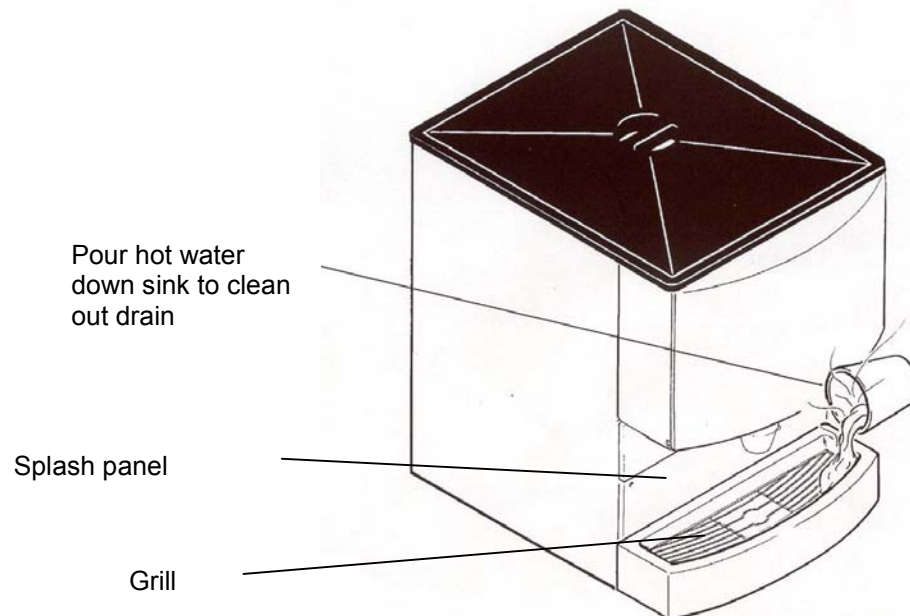
#### Daily:

Lift up and remove the grill from the sink.

Use soap, hot water and a clean cloth to wash the sink and splash panel: rinse with hot water, allowing plenty of hot water to run down the drain.

Wash the grill, then rinse with clean water. Place the grill back in sink.

Clean all exterior surfaces of the unit with warm water and a sponge. Rinse out the sponge with clean water, wring excess water out of the sponge, and wipe off external surfaces of the unit. Wipe unit dry with a clean soft cloth. **Do not use abrasive type cleaners.**

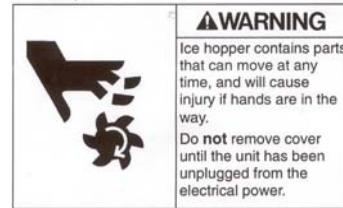


## Cleaning and Sanitizing

### Monthly And Initial Start-Up:

#### Sanitize the ice storage system

Disconnect power to the dispenser and ice machine.



Remove the dispenser front cover plate in front of the ice machine and discard all remaining ice,

Mix a solution of 1 ounce of household bleach to 2 gallons of potable water, or: mix a solution of any approved sanitizer, following the directions for mixing and applying that sanitizer.

Unscrew the sweep arm from the rotor shaft, and pull the rotor from the hopper.

Using a clean cloth or sponge, wipe all interior surfaces of the storage hopper with the sanitizing solution, allow to air dry.

Wipe all surfaces of the rotor and sweep arm with the sanitizing solution, allow to air dry.

Lift up & out and remove the upper front panel.

Twist the clear ice chute 1/3 turn and pull down to remove.

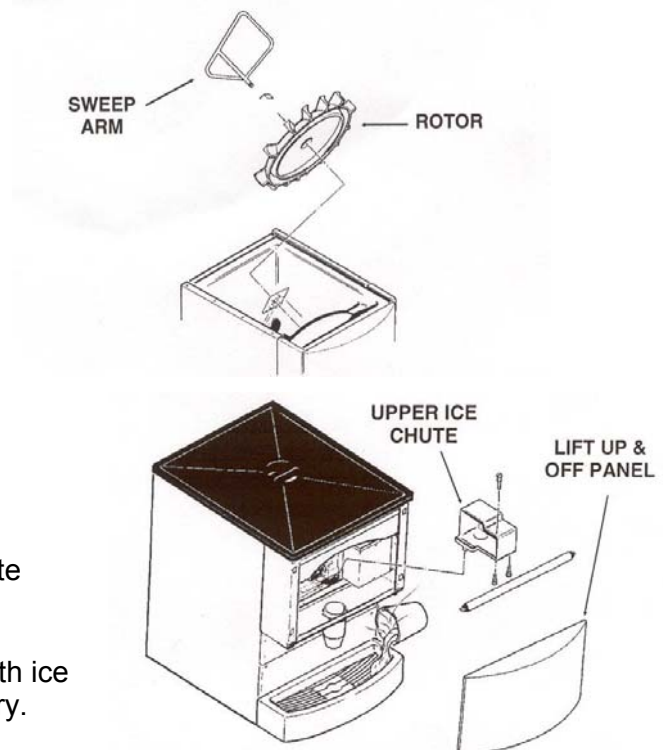
Locate the two thumbscrews holding the upper ice chute and remove them. Remove the upper ice chute from the machine.

Thoroughly wipe the surfaces of the bin door and both ice chutes with the sanitizing solution, and allow to air dry.

Place the upper ice chute back into the dispenser and secure with the thumb screws. Place the clear ice chute back into the dispenser and replace the upper front panel.

Reassemble the rotor and sweep arm assembly and replace the dispenser cover plate.

Reconnect power to the ice machine and dispenser.



## **Service Diagnosis/Electrical Sequence**

### **Service Diagnosis**

| <b>PROBLEM</b>        | <b>PROBABLE CAUSE</b>                                 | <b>CORRECTION</b>                         |
|-----------------------|---|---|
| Will not dispense ice | No ice in hopper                                      | Fill bin with ice                         |
|                       | Vend switch does not close                            | Check vend switch, replace if open        |
|                       | Drive motor not working                               | Check drive motor, replace if not working |
|                       | Door solenoid will not open door                      | Check/replace door and solenoid           |
|                       | Rotor will not turn                                   | Check hub of rotor                        |
|                       | Relay for vend switch does not close during operation | Check relays, replace as required         |

### **Electrical Sequence**    Reference Wiring Diagram, Page 20-21

#### **Ice Vending**

Ice is dispensed as long as the vend lever or push button is depressed or until the bin is empty.

When the ice vend lever or push button is depressed, the vend switch closes, and makes a circuit to the coil of relay A.

When relay A is energized, relay A's contacts 4-6 and 5-3 close. Relays A's contacts 5-1 open

When relay A's contacts 4-6 close, they make a circuit to the door solenoid, which opens the ice door.

When relays A's contacts 5-3 close, they make a circuit to the coil of relay B.

When relays A's contacts 5-1 open, the circuit to the timer is opened.

When relay B's coil is energized, it closes a circuit to the gearmotor, and the gearmotor turns the rotor.

#### **Agitation**

Relay A's contacts 5-1 are closed and make a circuit to the timer.

The timer is energized when the unit is not dispensing. The timer switch will close for a few seconds every two hours.

When the timer switch is closed, it makes a circuit to relay B's coil.

When relay B is energized, it powers the gearmotor and the rotor is turned.

This parts list contains the service parts available for the IOD16022 and IOS22030 ice only dispenser.

Check the model number on the data plate and refer to the correct column listing for the specific dispenser. These two models share many common components but also have components that are model specific.

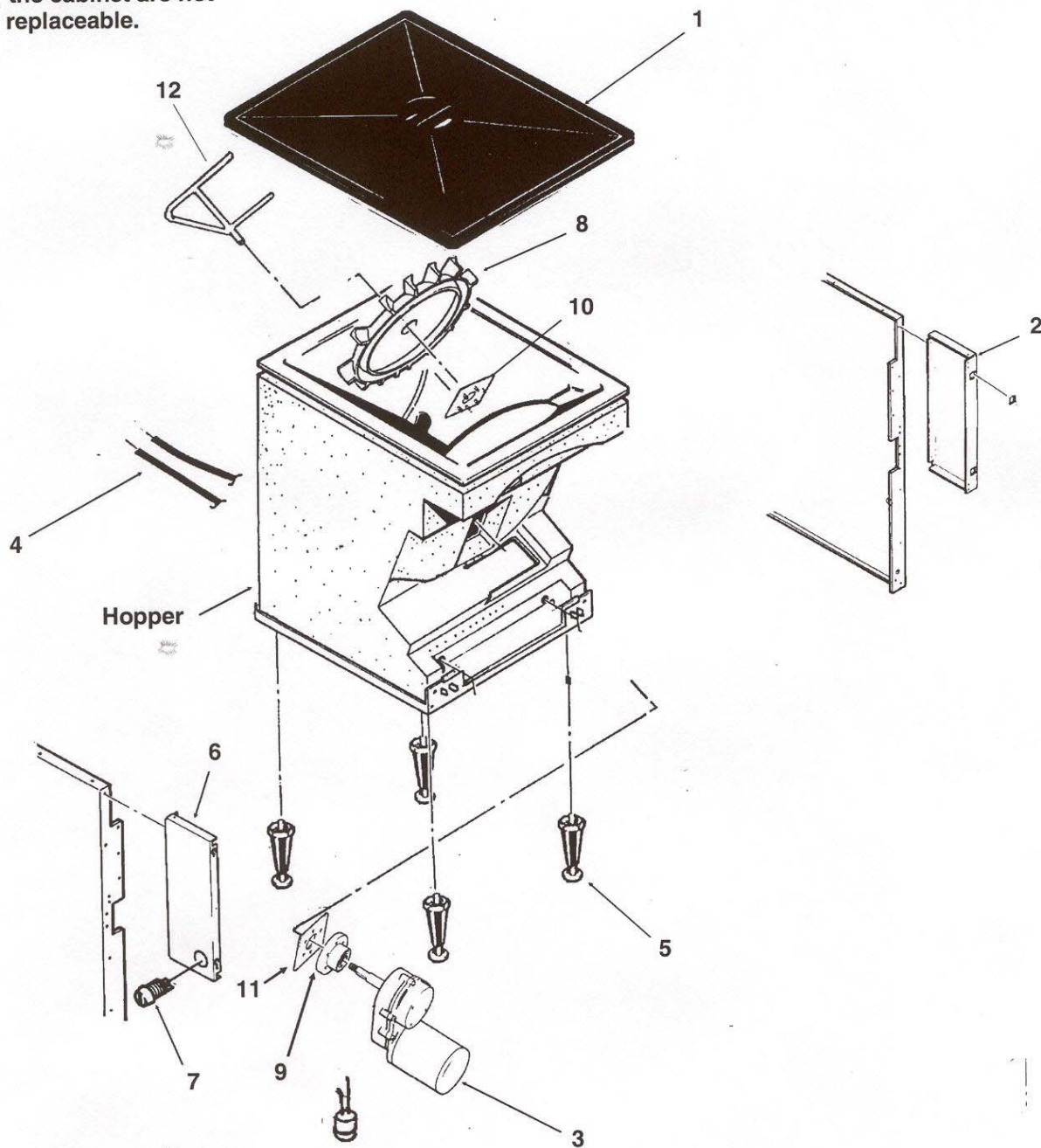
Check carefully that the correct part is identified and ordered.

### **TABLE OF CONTENTS**

|  |            |
|--|------------|
| Cabinet Pictorial                            | Page 12    |
| Cabinet Parts Listing                        | Page 13    |
| Cabinet Front Pictorial                      | Page 14    |
| Cabinet Front Parts Listing                  | Page 15    |
| Control Box Pictorial                        | Page 16    |
| Control Box Parts Listing                    | Page 17    |
| Ice Door and Solenoid Assembly Pictorial     | Page 18    |
| Ice Door and Solenoid Assembly Parts Listing | Page 19    |
| Wiring Diagram                               | Page 20-21 |

Cabinet

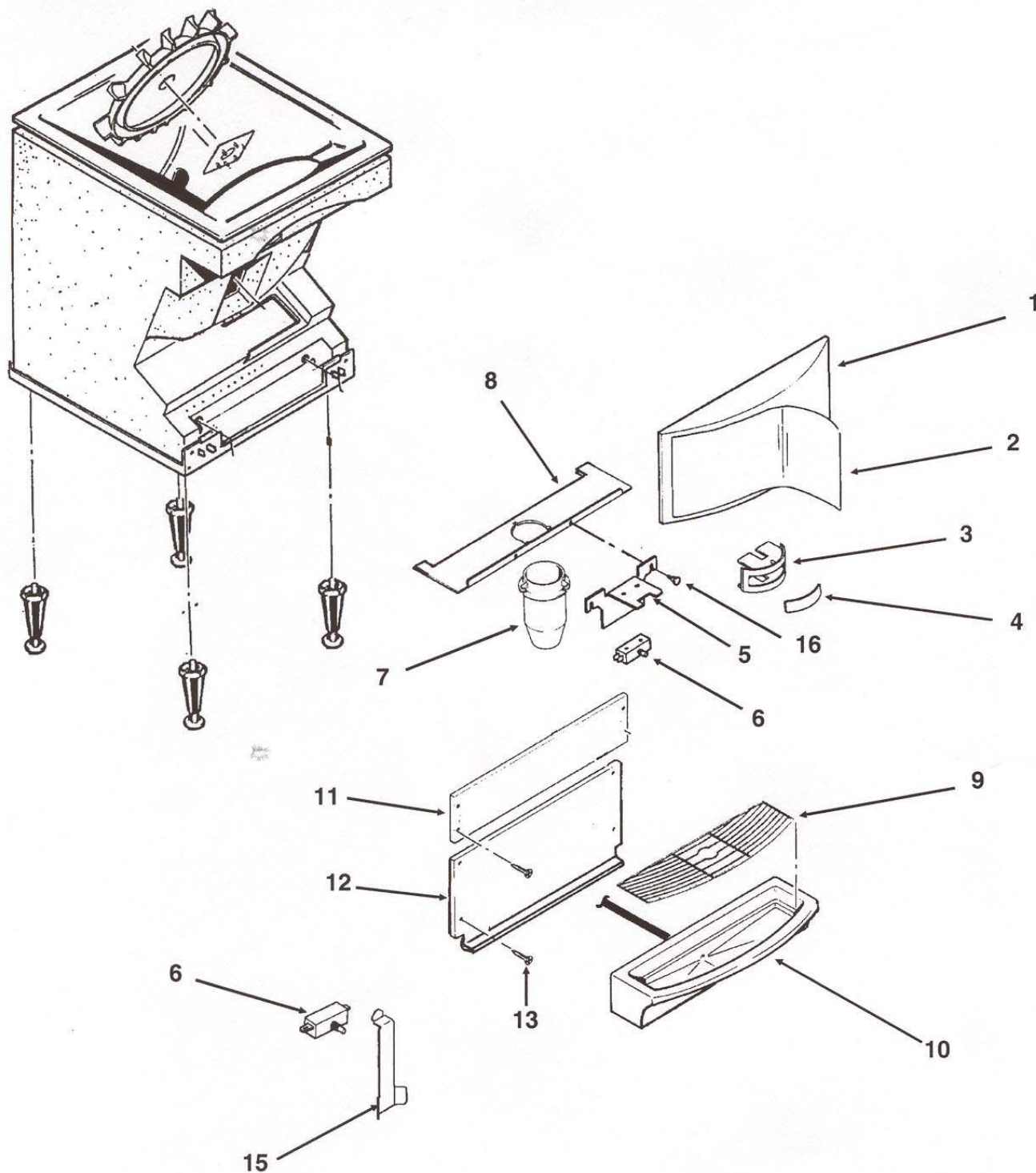
Note: The hopper assembly  
and/or the cabinet are not  
replaceable.



**IOD16022 and IOD2230 Service Parts****IOD16022  
IOD22030****Cabinet**

| <b>Item Number</b> | <b>IOD16022<br/>Part Number</b> | <b>IOD22030<br/>Part Number</b> | <b>Description</b>   |
|--------------------|---------------------------------|---------------------------------|----------------------|
| 1                  | 30064502                        | 30064512                        | Black Lid            |
| 2                  | 30074312                        | 30074312                        | Side Panel Extension |
| 3                  | 3012236901                      | 3012236901                      | Gearmotor Assembly   |
| 4                  | N/A                             | N/A                             | Drain Hose           |
| 5                  | 2066110000                      | 2066110000                      | Leg Kit              |
| 6                  | 30074311                        | 30074311                        | Side Panel Extension |
| 7                  | 1117390000                      | 1117390000                      | Switch, Lock and Key |
| 8                  | 3002304001                      | 3002304001                      | Rotor                |
| 9                  | 3A34760001                      | 3A34760001                      | Hub Assembly         |
| 10                 | 3A34810001                      | 3A34810001                      | Mounting Plate, Hub  |
| 11                 | 3A34817001                      | 3A34817001                      | Gearmotor Plate      |
| 12                 | 3002310305                      | 3002310305                      | Sweep Arm            |

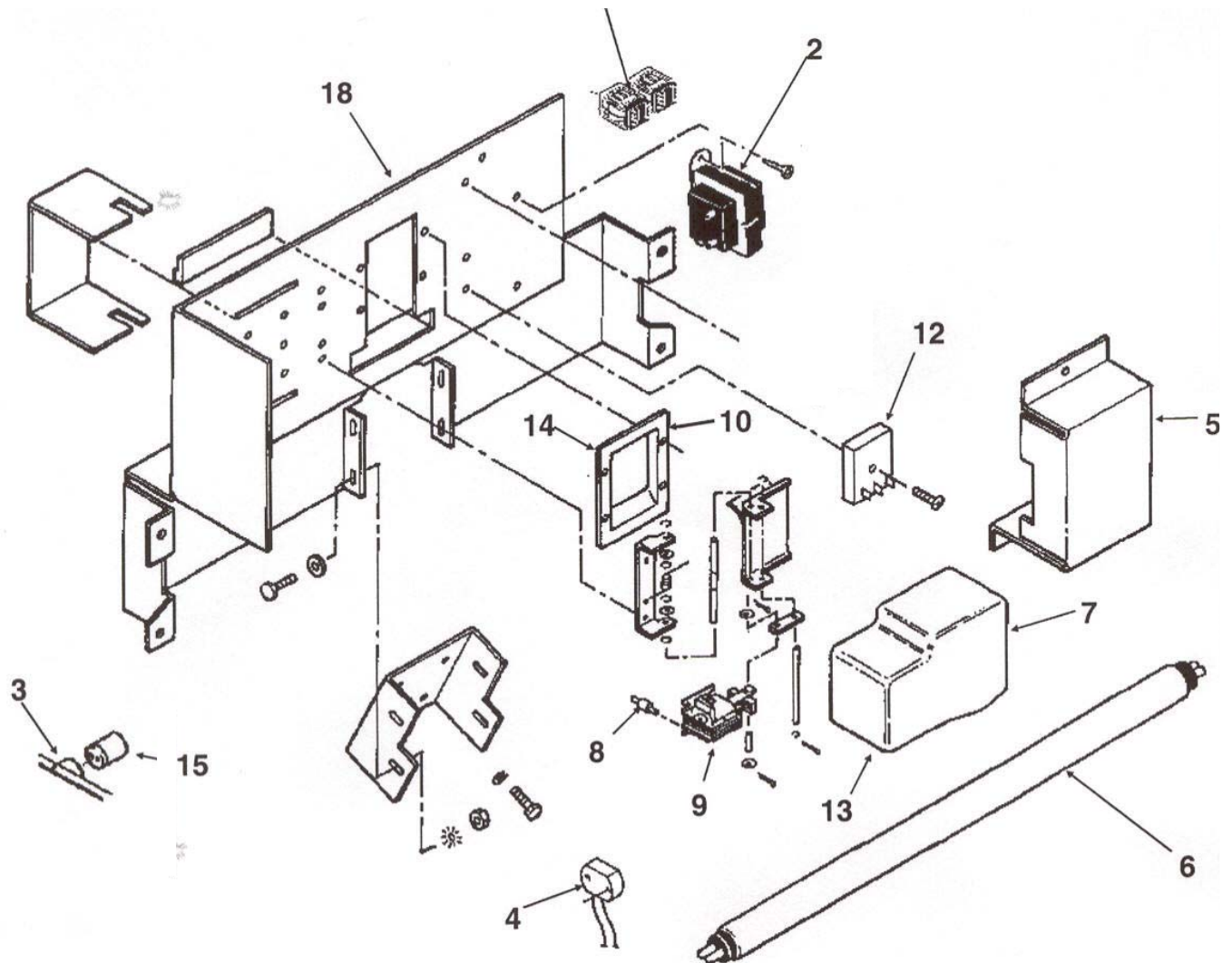
Cabinet Front



**IOD16022 and IOD2230 Service Parts****IOD16022  
IOD22030****Cabinet Front**

| <u>Item Number</u> | <u>IOD16022<br/>Part Number</u> | <u>IOD22030<br/>Part Number</u> | <u>Description</u>              |
|--------------------|---------------------------------|---------------------------------|---------------------------------|
| 1                  | 30064206                        | 30064226                        | Cover, Merch. Black-Lever       |
|                    | 30064218                        | 30064238                        | Cover, Merch. Black-Push Button |
|                    | 30069901                        | 30069901                        | Screws For Cover                |
| 2                  | 3015075218                      | 3015075418                      | Merch. Sign                     |
| 3                  | 3002307101                      | 3002307101                      | Bezel for Ice Switch Button     |
| 4                  | 3002307200                      | 3002307200                      | Button, Ice Switch              |
| 5                  | 30072700                        | 30072700                        | Push Button Switch Bracket      |
| 6                  | 30073000                        | 30073000                        | Microswitch (Push Button)       |
|                    | 3012157001                      | 3012157001                      | Microswitch (Lever)             |
| 7                  | 3002306801                      | 3002306801                      | Ice Chute                       |
| 8                  | 30072800                        | 30072830                        | Ice Chute Panel                 |
| 9                  | 3000570132                      | 30077031                        | Grill/Cup rest                  |
| 10                 | 30061102                        | 30061122                        | Black Drain Pan Assembly        |
| 11                 | 3A34794005                      | 3A34795009                      | Panel, Lever                    |
|                    | 3034794006                      | 3A34795010                      | Panel, Push Button              |
| 12                 | 30061810                        | 30076010                        | Splash Panel                    |
| 13                 | 30073200                        | 30073200                        | Screw                           |
| 14                 | 3012237201                      | 3012237201                      | Boot For Microswitch            |
| 15                 | 3A34806001                      | 3A34806001                      | Lever (Lever Models Only)       |
| 16                 | 3003072706                      | 3003072706                      | Thumbscrew                      |

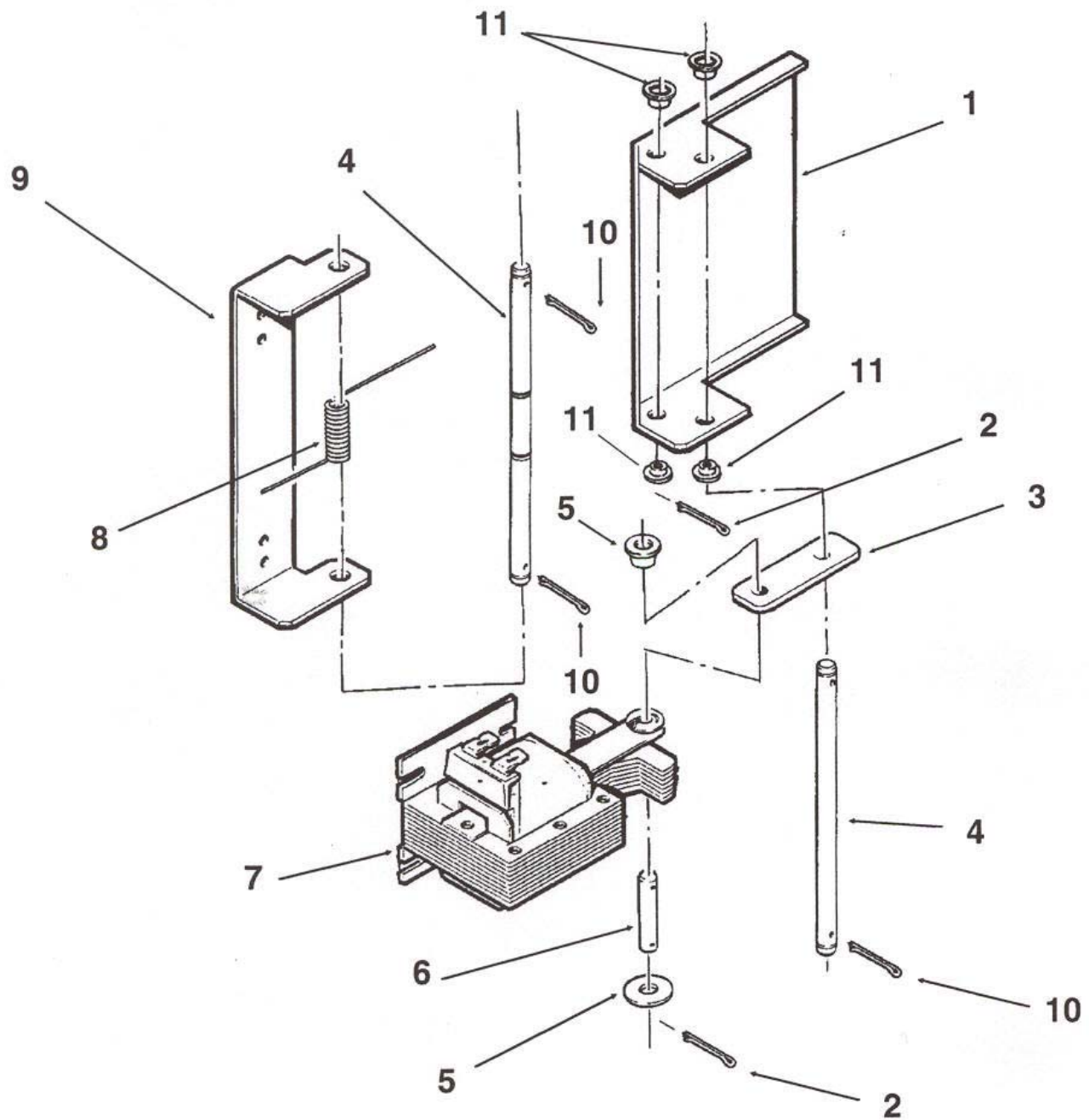
Control Box



**IOD16022 and IOD2230 Service Parts****IOD16022  
IOD22030****Control Box**

| <b>Item Number</b> | <b>IOD16022<br/>Part Number</b> | <b>IOD22030<br/>Part Number</b> | <b>Description</b>     |
|--------------------|---------------------------------|---------------------------------|------------------------|
| 1                  | 3000480001                      | 3000480001                      | Relay                  |
| 2                  | 1193210500                      | 1193210500                      | Transformer            |
| 3                  | 2021610000                      | 2021610000                      | Starter Socket         |
| 4                  | 3012238501                      | 3012238501                      | Bulb Holder            |
| 5                  | 30073510                        | 30073530                        | Control Box Cover      |
| 6                  | 3012237701                      | 3012237702                      | Fluorescent Tube       |
| 7                  | 3002306701                      | 3002306701                      | Cover                  |
| 8                  | 3013088201                      | 3013088201                      | Rubber Mounts          |
| 9                  | 3A32683003                      | 3A32683003                      | Solenoid               |
| 10                 | 3013059500                      | 3013059500                      | Door Gasket            |
| 11                 | N/A                             | N/A                             | Transformer            |
| 12                 | 3012237101                      | 3012237101                      | Agitation Timer        |
| 13                 | 3000522001                      | 3000522001                      | Thumb Screw            |
| 14                 | 3000477000                      | 3000477000                      | Spout Adapter Assembly |
| 15                 | 3012238601                      | 3012238601                      | Starter                |
| 16                 | 3012238002                      | 3012238002                      | Ballast (Not Shown)    |

**Ice Door and Solenoid Assembly**



**Ice Door And Solenoid Assembly**

| <u>Item Number</u> | <u>IOD16022<br/>Part Number</u> | <u>IOD22030<br/>Part Number</u> | <u>Description</u>             |
|--------------------|---------------------------------|---------------------------------|--------------------------------|
| 1                  | 3A34801001                      | 3A34801001                      | Ice Door                       |
| 2                  | 1061400000                      | 1061400000                      | Cotter Pin (6 Req.)            |
| 3                  | 3002308902                      | 3002308902                      | Solenoid Link                  |
|                    | 3000463000                      | 3000463000                      | Solenoid Link Bushings         |
| 4                  | 3002308801                      | 3002308801                      | Long Axle                      |
| 5                  | 1034580000                      | 1034580000                      | Washer                         |
| 6                  | 3A32685001                      | 3A32685001                      | Axle, Linkage                  |
| 7                  | 2066990000                      | 2066990000                      | Solenoid                       |
| 8                  | 3A32690002                      | 3A32690002                      | Torsion Spring                 |
| 9                  | 3A34802001                      | 3A34802001                      | Door Hinge                     |
| 10                 | 1061400000                      | 1061400000                      | Cotter Pin                     |
| 11                 | 3000463000                      | 3000463000                      | Plastic Hinge Bushing (6 Req.) |
|                    | 3000482000                      | 3000482000                      | Kit, Door Assembly             |

